What Is Claimed Is:

1. A method for producing a micromechanical component with the aid of a sacrificial layer,

wherein a patterned porous region (106) is produced in a silicon substrate (100) and a functional layer (130) is produced above the porous region (106), and in which the functional layer (130) is exposed subsequently, the porous region (106) being used at least partially as sacrificial layer.

- 2. The method as recited in Claim 1, wherein the porous region (106) is produced first and then the functional layer (130).
- 3. The method as recited in Claim 1 or 2, wherein the porous region (106) is provided as patterned region as a result of a doped first region (102) being produced in the substrate (100) in which no pores will form, and the porous region (106) will be produced subsequently.
- 4. The method as recited in one of the preceding claims, wherein the functional layer (130) is patterned and additional layers (140, 142) which cooperate with the functional layer (130) and which are provided in patterned form, in particular, are produced above the porous region (106).
- 5. The method as recited in one of the preceding claims, wherein the porous region (106) below the functional layer (130) is etched off in a drychemical manner.
- 6. The method as recited in one of the preceding claims, wherein the porous region (106) has a first porous partial region (103) and a second porous partial region (104), the second porous partial region (104) having higher porosity, and a cavity (107) is formed in the region of the second porous partial region (104) by a thermal treatment, and a cover layer (105) remains in the region of the first porous partial region (103).
- 7. The method as recited in Claim 6, wherein, to expose the functional layer (130), at least the cover layer (105) is etched off at least partially.

NY01 972991 v1 10

- 8. The method as recited in one of the preceding claims, wherein the functional layer (130) is produced first and the porous region (106) below the functional layer (130) is produced subsequently.
- 9. A micromechanical component, produced according to a method as recited in one of Claims 1 through 8.

NY01 972991 v1

11

Summary

A manufacturing method and a micromechanical component are provided in which porous silicon (106) is used as sacrificial layer and a functional layer (130) is exposed by etching off the sacrificial layer.

NY01 972991 v1

12